



## Problem of the Week

### Problem D

#### Overlapping Shapes 2

Selena draws square  $ABCD$  with side length 16 cm. Endre then draws  $\triangle AED$  on top of square  $ABCD$  so that

- sides  $AE$  and  $DE$  meet  $BC$  at  $F$  and  $G$ , respectively, and
- the area of  $\triangle AED$  is twice the area of square  $ABCD$ .

Determine the area of trapezoid  $AFGD$ .

